



UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE
Fort Worth, Texas

December 2002

SOUTHERN TOPICS

www.srh.noaa.gov

Working Together To Save Lives



On behalf of all of us here in Southern Region Headquarters, I want to wish all of our fellow National Weather Service employees, their families, and friends a heartfelt Merry Christmas and Happy Holidays. Your dedicated efforts over the past year have not only provided outstanding services but also continue to proudly set the standard for service to the nation.

Bill Proenza



NEW BROWNSVILLE MIC. I am pleased to announce the appointment of Shawn Bennett as the new WFO Brownsville MIC. Shawn has served as the SOO at the office for the past few years, and prior to that was the SOO at WFO San Juan. Before joining the NWS Shawn's NOAA experience included work at NSSL, where he was involved in applied radar research projects including activities at WFO Phoenix with the Salt River Project.

Shawn's appointment follows the retirement of long-time Brownsville MIC **Richard Hagan**, who steps down this month after 40 years of federal service. After military service which included a stint in Korea, Richard's first NWS assignment was at Little Rock in 1972, followed by WSFO Memphis (1974) where he was one of the first Warning Preparedness Meteorologists in the nation. Shortly afterward Richard became the MIC at WSO Savannah before moving on to WSO (later WFO) Brownsville, where he has served as MIC for the past 24 years. During those years he led that office through modernization, which included several major hurricanes, severe winter freezes and devastating flood events, and all the while ensuring that the office staff delivered to the Rio Grande Valley the epitome of the NWS service mission. Please join me in wishing a long and happy retirement to Richard, whose accomplishments as a Southern Region leader will last long.

BLAST 2003 PARTICIPANTS. In mid-November, final selections were made for the BLAST 2003 participants. This followed a challenging process by a group of field managers and myself to evaluate the excellent application packages from 46 candidates. This year Southern Region is partnering with the NCEP Storm Prediction Center by having an SPC forecaster as a member of the BLAST 2003 class.

The field evaluation team comprising Jose Garcia (Team Leader), Billy Olsen, Renee Fair, Jim Purpura, Dave Imy (SPC), and a MASC representative, worked many hours reviewing the applications and conducting the interviews. According to Jose, "Our job this year was exceptionally challenging because of so many excellent applications. It is obvious many people in the Southern Region are involved in progressive leadership activities." The team members indicated the BLAST applicants had numerous good ideas they will use in their offices.

All the BLAST applicants should be proud of their accomplishments and I encourage those not selected this year to apply for the 2004 BLAST program. We encourage *everyone* to participate in your Local Office BLAST Program. Remember, leadership is a behavior, not a position.

The 2003 Southern Region BLAST participants are (in alphabetical order):

David Andra - SOO, WFO Norman, OK
Kevin Brown - Sr. Forecaster WFO Norman, OK
Brian Burgess - ESA, WFO Huntsville, AL
Jeff Craven - SOO, WFO Jackson, MS
Steven Drillette - WCM, WFO Amarillo, TX
Mark Frazier - Sr. Forecaster, WFO Memphis, TN
Reggina Garza - Sr. Hydrologic Forecaster, Southeast RFC, Peachtree City, GA
Patricia Hart - Sr. Forecaster, WFO Birmingham, AL

David Hotz - Sr. Forecaster, WFO Morristown, TN
Paul Kirkwood - CWWD, SRH Fort Worth, TX
George Mathews - WCM, WFO Tulsa, OK
John Metz - Forecaster, WFO Corpus Christi
Sarah Taylor - Asst. Mesoscale Forecaster, Storm Prediction Center, Norman, OK
Lance Wood - Sr. Forecaster, WFO Houston, TX

Congratulations to everyone who applied for BLAST. You are the reason the program is a major success.

IFPS

RAPID PROTOTYPE PROCESS (RPP) WORKSHOP. Last month, Mark Mathewson of FSL hosted a workshop for all interested parties on the topic of the Rapid Prototype Project (RPP). The overall goal of the RPP workshop was to resolve some of the outstanding text formatter issues, brainstorm areas of the GFE that need improvement, and provide a prioritized wish list to help direct the development activities of GFESuite. Each of the NWS regions, as well as NWSH Office of Services, was represented. Participants from Southern Region included Steve Nelson (WFO Norman), Charlie Paxton (WFO Tampa Bay Area), Scott Plischke (WFO Amarillo), Jack Settelaar (SSD), and Ed Tirado (WFO San Juan).

Over the course of the workshop, a status of the many RPP initiatives was given by both FSL developers and field participants working closely with FSL. Discussion on each of the initiatives was interspersed with status updates. These discussions formed the basis for an exercise to map out the future course of RPP development efforts.

In short, the development time of FSL is split between two time periods separated by April 2003. Until April 2003, most of the RPP development time will be focused on ensuring the revamped text infrastructure is robust enough to meet IFPS ORD deadlines. Beyond April 2003, it is expected more time will be devoted to more typical RPP efforts. Focused RPP efforts include improving the SmartInit and SmartTool, updating the Daily Forecast Critique function, as well as continually improving the look and feel of the main Graphical Forecast Editor (GFE) User Interface. In particular, there is a plan to gather a number of interested field personnel to work more closely with FSL on a focused issue. As recent success has shown with the text formatting team, FSL is seeking to invite those that are interested in working in a "rapid" fashion to improve the GFE SmartInit and SmartTool functionality. Look to your regional IFPS focal points for more information on how to participate on this new team.

SR Rapidly Becoming Fully Operational on IFPS. Like Santa and his elves busily preparing for the holiday season, our SR WFOs are also busily preparing to become fully operational on IFPS by December 15- preparing grids and graphics using IFPS. As evidence of the progress our offices are making, as of the first week of December, over two-thirds of our offices are posting their IFPS forecast graphics to their Web sites. In addition, although not required by December 15, over half

of our offices are contributing their forecast grids to the experimental NDFD server at NWSH, with more contributing with each passing day. Should the current pace of NDFD contributions continue, shortly after the turn of the new year we will have all of our sites contributing. Keep up the good work and Happy Holidays from your SR IFPS Team!

CLIMATE, WATER AND WEATHER DIVISION

METEOROLOGICAL SERVICES BRANCH

SHUTTLE LANDS - *FINALLY*. On an historical note, for three consecutive days last week re-entry and landing of the space shuttle Endeavor was waved-off by NASA's Mission Control at Johnson Space Center in Houston, due to unacceptable weather at Kennedy Space Center. The delay marked the first time in the 21-year history of the shuttle program that a landing was postponed for three days in a row. The NWS Spaceflight Meteorology Group at JSC has primary responsibility for the critical landing forecasts that must be right, because once a decision is made to de-orbit the shuttle, there's no turning back!

After three NO-GOs it was determined the landing would have to occur on the fourth day (Saturday) - if weather did not cooperate in Florida, then the plan would be to land at Edwards AFB. The shuttle carried enough propellant and consumables to delay landing until Sunday, if absolutely necessary, but NASA was reluctant to live that close to the edge of the performance envelope. Four landing opportunities were available on Saturday: 2:37 and 4:15 p.m. at KSC, followed by 5:45 and 7:22 p.m. in California. As it developed, nature cooperated, the forecasts were right-on, and Endeavor made it safely home to KSC on the first opportunity on Saturday.

KUDOS FROM SECRETARY EVANS. Congratulations to WFO Lake Charles for recognition for their service to the citizens in southwest Louisiana during Hurricane Lili. The Lake Charles office recently received a letter from Commerce Secretary Evans congratulating them on "the fine work you and your staff have done to forge a true warning partnership in southwest Louisiana."

HAMBURGERS AND HANGAR STORIES AT LUBBOCK INTERNATIONAL AIRPORT. WFO Lubbock forecaster Jody James presented aviation weather information to a group of pilots, instructors and other guests at Stratos Aviation, a local flight school at Lubbock International Airport last month. Twenty-five people enjoyed hamburgers and soft drinks in a Stratos aircraft hangar before the workshop. Workshop topics included thunderstorm avoidance, radar basics and aircraft icing. The workshop served as a part of the ground school curriculum for student pilots at Stratos. They are working to earn their private pilot certificates. Jody is a private pilot himself and a volunteer Aviation Safety Counselor with the FAA. Jody is planning more hazard awareness training workshops around the South Plains for our aviation customers in the near future.

AVIATION WORKSHOP IN SAN JUAN. On October 10 WFO San Juan WCM Rafael Mojica participated in an FAA sponsored aviation workshop for the San Juan area pilots, at the Inter-American University Aeronautical School. Around 80 commercial, private, military and law enforcement pilots attended the activity. Rafael conducted a presentation on the NWS Aviation Weather Center and the Volcanic Ash Program. The previous month Puerto Rico was affected by a volcanic ash cloud from the island of Montserrat in the Lesser Antilles, which impacted aviation operations across entire CWA.

AVIATION WORKSHOP HELD IN HOUSTON. WFO Houston/Galveston sponsored an aviation workshop on November 13. Participants included representatives from the FAA Regional Air Traffic Management Unit (TMU), the Conroe Automated Flight Service Station (AFSS), Center Weather Service Unit (CWSU) located at Bush Intercontinental Airport (IAH), NASA/NWS Space Flight Meteorology Group (SMG), and the local flying club at Clover Field. CWSU meteorologists Matthew Bishop and Leslie Petersen discussed their interaction with air traffic control personnel. SMG meteorologist Tim Garner provided a presentation on forecasting landing conditions for the space shuttle.

Customer insight came from several sources. TMU manager David Frame relayed the disruptive impacts of adverse weather on inbound and outbound air traffic from Houston Intercontinental. AFSS Conroe flight briefing specialists Ashley Waters and Bob Thompson praised the Area Forecast Discussion products. They said it helped them understand the reasoning behind the TAFs. General aviation pilots Carter Tull and Jeff Richichi said that they get aviation weather information from the Internet prior to having a verbal briefing from the flight service station.

Overall, the aviation workshop provided an excellent opportunity to interact with users of NWS aviation products. Consider planning one for your area customers and partners.

SEVERE WEATHER PREPAREDNESS & OUTREACH

Winter Weather Guides Developed for North Alabama. In preparation for upcoming winter hazards, WFO Huntsville WCM Tim Troutman and senior forecaster Matt Zika developed the annual “2003 Alabama Winter Weather Awareness Week Guide.” The comprehensive winter weather pamphlet was distributed to over 925 media, school and emergency management customers throughout North Alabama.

WFO Lubbock “Vortex Generator” a Hit at Outreach Event. WFO Lubbock WCM Ed Calianese, senior forecasters Ron McQueen and Jody James, and forecasters Anthony Cavallucci and Shawn Ellis represented the NWS at the annual Lynn County Health and Safety Fair. The event was staffed by nearly 35 organizations and attended by 525 local citizens, of which 277 were school children. The big hit at the NWS booth was a vortex generator, built by a local Skywarn Spotter, which produced miniature tornado vortexes for public viewing. The NWS group also distributed severe, winter weather and children safety brochures, including printouts of the NWS “click-for-forecast” Web page, and NWS logo pens and rulers.

Weather Awareness Day, Alabama Style. WFO Birmingham, in partnership with the management staff at the Summit shopping plaza, hosted a timely weather awareness day at the largest outdoor shopping facility in Alabama. The theme of the timely awareness event, the "Secondary Severe Weather Season in Alabama," preceded the significant multi-state tornado outbreak that occurred in mid-November. WFO Birmingham participation included WCM Brian Peters, SOO Kevin Pence and forecasters Ken Lorek, Dave Wilfing, Faith Borden, Mark Linhares, Jason Wright, John Peruzzo and Darone Jones. Other media, vendors and volunteers for the event included: all major television stations, Alabama Power, the American Red Cross, Birmingham Fire, Trussville Fire, EMA officials, and HAM radio operators. The highlight of the event was the Tornado Simulator provided by the Trussville Fire Department.

Great American Teach-In. WFO Tampa Bay Area participated in the annual Great American Teach-In to celebrate Education Week, which provided a special opportunity to visit schools and share meteorological knowledge and career opportunities with a new generation of future scientists. WCM Dan Noah and forecaster Ron Morales provided informative presentations about NWS operations, weather forecasting and weather safety to 582 students at four west-central Florida middle schools.

EMERGENCY MANAGEMENT COORDINATION

WFO Huntsville Emergency Management (EM) Workshop. WFO Huntsville MIC John Gordon, WCM Tim Troutman and SOO Tom Bradshaw conducted an EM workshop and tour of the WFO for North Alabama area EMs. John, Tim and Tom also provided the EMs with a detailed and well-received presentation involving WFO Huntsville's operational plans for 2003.

El Niño Presentation Provides Outlook to Emergency Management. WFO Melbourne MIC Bart Hagemeyer provided a presentation on the effects of El Niño/La Niña on Florida weather including the Florida Dry Season Forecast at two sessions of the "Current Issues in Emergency Management Program" conference held at the Florida Division of Emergency Management in Tallahassee. Approximately 100 Florida emergency management personnel attended the timely and informative sessions to help them understand and prepare for the moderate El Niño forecast to affect Florida this winter and spring.

MEDIA/PUBLIC EXTERNAL SUPPORT

WFO Melbourne Tours and Trains Emergency Management at Disney World. WFO Melbourne WCM Dennis Decker and forecaster John Pendergrast met with the Disney World emergency management director to conduct an overall analysis of severe weather hazards and vulnerabilities that affect the Disney complex in Orlando. Later that evening, the WFO Melbourne duo provided Skywarn spotter training for the Disney Emergency Amateur Radio Service (DEARS). The DEARS group is made up of about 20 Disney employees who operate a repeater on park property which serves to relay severe weather reports to WFO Melbourne. They also serve as a communications link to the Disney World emergency operations center.

CWSU Miami Participates in Aviation Outreach. Miami Center Weather Service Unit MIC Stan Holland provided an aviation outreach presentation at the annual “Seasonal Aviation User’s Meeting” hosted by the Miami Air Route Traffic Control Center. Stan described the fall and winter weather threats to aviation and provided a thorough description of the duties and capabilities of staff at the Miami CWSU. Approximately 70 users were in attendance, including pilots from American, Delta, United, Atlas Cargo and Bahamas Air, as well as FAA personnel from Command Center and various control towers in South Florida.

HYDROLOGIC SERVICES BRANCH

WFO ALBUQUERQUE. On November 20, WFO Albuquerque MIC Charlie Liles made a presentation to the governor’s Blue Ribbon Task Force on relationships between ENSO, the PDO, and New Mexico precipitation. After the presentation hydrologist Ed Polasko also helped field questions from the group. The task force comprises a diverse group of scientists and engineers from Los Alamos and Sandia National Laboratories, as well as tribal leaders and advisors to the governor. The focus of the meeting was on water issues that residents of New Mexico will be facing in the 21st century.

SCIENTIFIC SERVICES DIVISION

UNIVERSITY ASSIGNMENT PROGRAM. The annual “Call for Applications” for the University Assignment Program should be issued soon. Funding for the UAP is provided from the national level and it supports full- and part-time (work/study) university assignments. There have been some changes in the way the UAP will be managed this year, but application procedures should be little changed from past years. The deadline for applications has not yet been determined. One change in the program recognizes that “academic years” beginning with fall courses is a largely outdated concept, so an effort will be made to provide support for courses (either in-residence or on-line) beginning as soon as possible after the applications are received and reviewed for approval. In other words, employees considering undertaking courses as early as next January or February are encouraged to review the UAP call with their supervisors as a possible means for funding support. As always, official time that is proposed for such studies should also be carefully reviewed by employees and supervisors.

SCEP SUCCESS. Karen Trammell, a SCEP employee at WFO Norman and graduate student at the University of Oklahoma, has been awarded an AMS/NOAA Office of Global Programs Fellowship. Karen is pursuing her MS in meteorology and plans to join the NWS when she graduates, with the goal of one day becoming a WCM. Congratulations, Karen.

TRAINING FOR EMERGENCY RESPONSE. On November 13-14 WFO Fort Worth conducted a two-day training program to initiate its Emergency Response Meteorologist (ERMET) Program. Five meteorologists from the WFO staff and three from Southern Region Headquarters attended the training. The objective was to prepare the participants for providing on-site hydrometeorological support in conjunction with emergency managers and other first-responders during emergency events involving terrorist activities or incidents involving accidental release of industrial hazardous materials.

Training covered the following topics:

1. Weather information needs of first-responders and an introduction to the incident command system (Fort Worth Fire Department instructor).
2. Use of the Aloha plume dispersion software by fire service personnel in a hazmat incident (Fort Worth Fire Dept).
3. NOAA Office of Hazmat perspective on hazardous materials response (Marc Hodges, NOAA Trajectory Analyst, Seattle, Washington).
4. Conducting concise weather briefings (Jim Maxwell, WFO Fort Worth DAPM).
5. Emergency Operations Center (EOC) operations during a terrorist or hazmat incident (Pat McMacken, Irving, Texas emergency management coordinator).
6. Plume dispersion modeling and forecasting and use of the HYSPLIT model (Bernard Meisner, SRH Scientific Services Division).
7. Remote communications capabilities under development at SRH (Paul Kirkwood, Dissemination Enhancement Team).
8. Training for participation in media interviews (Ron Trumbla, NOAA Public Relations Officer, SRH).

By all accounts the ERMET training was very successful, and the WFO staff is now much better prepared to support its partners in the emergency services in the event of a local crisis. Additional training is planned but the two-day workshop was an excellent start toward providing full proficiency. The WFO plans to become more proactive in participating in drills conducted by various emergency management agencies within its CWA.

SOUTH FLORIDA COLLABORATIVE LIGHTNING PROJECT. WFO Miami MIC Rusty Pfof and SOO Pablo Santos participated with FSU's Dr. Henry Fuelberg and three of his students in an initial meeting at the headquarters of Florida Power and Light (FP&L) to discuss collaborative research on lightning in South Florida. The FP&L participants included retired former WFO MIC Paul Hebert. FP&L will be funding the lightning project for the purpose of understanding and eventually predicting lightning distributions, frequencies and polarity in Miami-Dade and Broward counties. Results may also be expanded and applied elsewhere in South Florida.

After introductions at the meeting, Dr. Fuelberg described research he has already completed on lightning climatology for the state of Florida, and how lightning is related to broad scale flow and mesoscale circulations such as the sea breeze. The group then discussed the deliverables of the project, how WFO Miami's mesoscale modeling efforts can contribute, and a time table for

completion of the project. After lunch at FP&L the group reassembled at the WFO where Pablo demonstrated results of the joint WFO Miami/University of Miami mesoscale modeling efforts using the workstation Eta model. Dr. Rich Knabb, TPC/NHC SOO, then provided a tour of TPC and the NHC to end the day.

NEW COMET WEBCASTS. The COMET program has developed two new Webcasts on the climate phenomenon known as the Madden-Julian Oscillation (MJO). These presentations are companion lectures as part of the on-going series of climate variability workshops (Climate Symposia) held at COMET. The two 40-minute presentations are complete with bibliography and climate terminology glossary. They are: *The MJO Life Cycle*, by Dr. Roland Madden, and *Role of the MJO in Oceanic and Atmospheric Variability*, by Dr. Klaus Weickmann. Access these and other Webcasts from links on the MetEd Web site at <http://meted.ucar.edu>. Forecasters who have attended the climate symposia have been most impressed with the two lectures, commenting particularly on how much they contributed to improved understanding of climate phenomena.

These Webcasts require the FLASH 5.0 player to provide the audio and accompanying animation sequences. The most recent versions of both Internet Explorer and Netscape will have the FLASH player plug-in installed, but if it is necessary to install the FLASH 5.0 player, follow the directions in the Tech Notes for each module.

Two other recent Webcasts published by COMET are *Dispersion Basics*, a half-hour presentation featuring COMET director Dr. Tim Spangler and based on a lecture from the last COMAP course, and *Isentropic Analysis*, a one-hour presentation by Dr. James Moore (Saint Louis University), which was also given during COMAP. Both are excellent overviews of the subjects and are well worth forecaster review. For technical support for any of the Webcasts contact support@comet.ucar.edu. COMET also welcomes comments, which can be directed to Pat Parrish (pparrish@comet.ucar.edu) or Wendy Schreiber-Abshire (abshire@ucar.edu).

TELETRAINING FOR JANUARY. Teletraining sessions planned for January as part of the Integrated Sensor Training Professional Development Series (ISTPDS) and the Virtual Institute for Satellite Integration Training (VISIT) are listed below. Offices can register for these sessions by sending an email to: visit@comet.ucar.edu. Access the teletraining calendar at the following Web site: <http://www.cira.colostate.edu/ramm/visit/ecal.asp>.

- Anticipating Mesoscale Band Formation in..... January 6
Winter Storms (basic)
- Lake-Effect Snow II (advanced) January 8, 9, 13, 15
- Cyclogenesis: Analysis Utilizing Geostationary ... January 10, 21, 28
Satellite Imagery (basic)
- TROWAL Identification (basic) January 14, 16, 22, 30

The sessions on "TROWAL" (TROugh of Warm air Aloft) are new and were developed by Scott Lindstrom and Scott Bachmeier (CIMSS/VISIT), and Jon Martin (University of Wisconsin-Madison). The objectives of this lesson are to learn more about:

1. Extratropical cyclone structure,
2. How to use AWIPS to find TROWALs, and
3. How TROWAL identification can help forecast accuracy.

All of the teletraining sessions can be reviewed in advance by following instructions in student guides available on the ISTPDS/VISIT page at:

<http://www.cira.colostate.edu/ramm/visit/visithome.asp>.

WEATHER EVENT SIMULATOR CASE LIBRARIES. SSD has begun distributing locally-developed WES cases to our field offices. These cases will enable the offices to meet the requirement of two simulations completed by all forecasters before the start of each significant weather season. The first cases to be distributed include a winter weather case developed by WFO Lubbock, a synoptically forced convection case developed by WFO Mobile (which includes suggested AWIPS D2D procedures that emphasize use of the forecast funnel technique across several scales of motion), a severe thunderstorm case developed by WFO Jackson, which focuses on warning composition and the correct use of WARNGEN, and a severe weather virtual reality simulation developed by WFO Tulsa. A technical attachment (<http://www.srh.noaa.gov/ftpoot/topics/attach/pdf/ssd02-36.pdf>) this month shows the cases so far included in the regional WES library.

Before distribution each case is reviewed by SSD, a data inventory is compiled and the case is formatted for easy installation using a standard install script. While no radar data were archived for the Lubbock case, Bernard Meisner was able to add base velocity and reflectivity imagery to the case from the NCDC Archive II using HP-UX executable scripts developed by Paul Jendrowski (ITO WFO Blacksburg, Virginia).

Office of Climate, Water and Weather Services Training Division is developing a national library of locally developed Weather Event Simulator cases. All cases submitted to the Southern Region library will automatically be included in this national library. Links to both libraries are available on the SSD WES Support Web page: <http://www.srh.noaa.gov/SSD/WES/>

Our field offices continue to rely heavily on our 30-day regional AWIPS archive for data to use for their locally developed cases while they await the Mod Note and installation hardware for their local AWIPS archive boxes.

SYSTEMS OPERATIONS DIVISION

SYSTEMS INTEGRATION BRANCH

SURFACE OBSERVATION PROGRAM. During October and into early November SRH received 35 requests from the aviation community for new certificates, cancellation, and changes in type of surface certificates. We have seen a slowdown in the number of new certificate requests in both October and November after the FAA took over all ASOS augmentation in the region.

UPPER-AIR OBSERVATION PROGRAM. The October upper air rankings for Southern Region offices continue to be excellent. Fifteen of the 23 SR U/A offices received scores above the national average of 285.07. Thirteen offices received scores above 290 (a perfect score is 300). WFO Tampa Bay led all SR sites with an October rating of 299.75, just ahead of WFO Fort Worth with a score of 298.37. Both offices continue to drive the performance measure higher.

Other offices deserving notable mentions include Miami (298.36), Nashville (298.23), Jacksonville (296.57), Little Rock (294.05), Birmingham (293.76), New Orleans (293.40), San Juan (293.13), Amarillo (292.19), Del Rio (291.58), Lake Charles (290.21), and Brownsville (290.07). WFO Fort Worth's 12 month average leads the region with a top score of 294.73, just ahead of Lake Charles with 293.30. Even with a few uncontrollable equipment problems, all SR upper air programs continue to do an outstanding job.

RSOIS. Radiosonde Surface Observing Instrumentation System (RSOIS) has been installed at WFO San Juan. A fiber optic cable to complete the communication line from RSOIS to a PC in office has been ordered. Once this cable is received and installed, only WFO Norman remains to complete Phase I of the RSOIS Implementation Plan in SR. In Phase II, a few sites remain to install their concrete pad and tower ahead of equipment delivery. WFOs Miami, Fort Worth and Tampa Bay Area have work orders in place to have this work completed.

Rob McFall (WFO El Paso) developed a procedure to allow the transfer of MicroART archive files to another PC via a cable link. This eliminates the need to copy the data onto a 5.25" floppy for manual transfer into another PC, then electronic transmission to NCDC. WFOs El Paso, Nashville and San Juan are currently testing this new procedure. Once the test is complete Southern Region, in conjunction with NWSH, will distribute the software and procedures to all upper air sites throughout the country. The new procedure will help prolong the life of the MicroART computer and should help reduce office data acquisition workload.

Alton Abernathy, SRH upper air/surface programs manager, recently completed office reviews at WFOs Mobile, Tallahassee, San Angelo and Midland. All data acquisition activities were reviewed at each office and all received satisfactory ratings.

PCROSA REPLACEMENT PROJECT. Last month a contract modification was approved and forwarded to MASC to compensate the contractor for NWS requested work outside the original contract specifications. Frank Solutions, Inc. (FSI) provided the preliminary design specifications and plans to begin software system development soon. Southern Region expects an operational system readiness test by January 15, 2003. The system will be installed in SRH with field testing starting in early February.

FISCHER PORTER UPGRADE. Two of the three Fischer Porter Upgrade (FPU) test systems installed in the Southern Region failed during the past month. Both systems experienced excessive missing data. Preliminary indications point to problems with the power supply and batteries. A replacement test unit was sent to WFO Nashville and the original returned to NWSH ,who will forward it to Coastal Environmental for evaluation. A similar failure has been documented by WFO San Juan. Corrective action on the San Juan system is pending.

JEFFERSON AWARD PRESENTED. The Thomas Jefferson Award, the most prestigious award available to a Cooperative Weather Observer, was presented last month to John D. Isenhower by WFO San Angelo MIC Buddy McIntyre. The award ceremony was held at the Isenhower home in Putnam, Texas.

HOLM AWARD PRESENTED. The John Campanious Holm Award, the second highest award available to a Cooperative Weather Observer, was presented to Mr. and Mrs. Thomas Kellum of Alto, Texas last month by WFO Shreveport MIC Lee Harrison.

WSR-88D LOCAL OPERATIONS AGREEMENT IN SAN JUAN. On November 26 SRH facilitated the NEXRAD Unit Radar Committee (URC) meeting for the FAA-owned WSR-88D in Puerto Rico. Participants included the local WFO, local FAA Airways Facilities (AF) electronics technicians as well as SRH personnel and Radar Operations Center and DOD personnel who participated via teleconference. The primary concern was the creation of a new Local Operations Agreement (LOA). The LOA is currently out for review by all parties. Southern Region is confident this agreement will satisfy the operational needs of the WFO meteorologists and the local FAA AF technicians who maintain the radar, as well as the FAA Atlantic Operations Control Center and the Miami sector maintenance office who also assist and/or oversee the local FAA AF technicians.

LEASE FOR MIAMI WSR-88D. The existing ten-acre land use agreement between the NWS and the U.S. Army for siting the Miami WSR-88D expires at the end of this year. The Army is abandoning the property about the same time. SRH is actively working with MASC to secure NWS ownership of the surplus ten acre tract through GSA at no cost.

KEESLER AFB WSR-88D RELOCATION. The Radar Operations Center has broken ground in Brandon, Mississippi for installation of the relocated Keesler AFB WSR-88D. The Keesler radar is being dismantled and will be shipped to Brandon in the months ahead. SRH and WFO Jackson are working with the ROC and the AWIPS Program Office to ensure all operational and logistical issues are accounted for. SRH will work with WFO Jackson to ensure a seamless transition with regard to notification of NWS customers and users. In addition, SRH has the action to restore the old WSR-88D site at Keesler AFB.

ASOS ACU RELOCATIONS. Under the guidance of SRH the ASOS Acquisition Control Unit (ACU) was relocated at Houston George Bush Intercontinental (IAH) Airport. This was necessary due to the relocation of the FAA contract weather observers at the site. Other ACU relocations across the region include Guthrie, Oklahoma because of airport renovations, and Denton, Texas with the construction of a new federal control tower.

WFO HUNTSVILLE RADAR COVERAGE. WFO Huntsville is receiving WSR-88D data via dedicated telephone lines from both the Hy-Top, Alabama (KHTX) and the Columbus, Mississippi (KGNX) WSR-88Ds. The new wideband T-1 service interfacing the Hy-Top radar to WFO Huntsville has also been installed and successfully tested. The ROC, ahead of schedule, installed the needed ORPG with Build 2.0 at WFO Huntsville allowing the timely installation of new dedicated telephone circuits from the KHTX RPG to WFOs Morristown and Nashville. This installation will ensure uninterrupted service to those offices during the operational services transition next month. At that time a hot cut-over will take place redirecting the data from the KHTX WSR-88D and WFO Birmingham to the new WFO facility via the new T-1 service.

WEST MEMPHIS, ARKANSAS AIRPORT ASOS INSTALLATION. In response to a new FAA data acquisition requirement, SRH has partnered with NWSH, the FAA Southwest Region, and WFO Memphis to site and install a new FAA-sponsored ASOS in West Memphis. WFO Memphis will be responsible for site maintenance and has already accepted the ASOS from the NWSH contractor. The site is successfully sending its data via the FAA Memphis Air Route Traffic Control Center. Minor outstanding deficiencies are being addressed locally, allowing the site to be ready for commissioning next month.

ASOS PROCESSOR UPGRADE AND PLANNED PRODUCT IMPROVEMENT. Several SRH sites continue to participate in the Operational Test and Evaluation (OT&E) of the new ASOS processor upgrade. After a brief hiatus, due to persistent problems with lockups and warm starts, the latest ASOS software version 2.7A-3 has been installed at three single cabinet sites in SR (Austin and Pine Springs, Texas and Guymon, Oklahoma). The unreliability of the software at sites other than single cabinet sites has placed an unacceptable maintenance and repair burden on the local ET staffs in Southern Region. NWSH continues to work with all the regions to identify the problems and expand the number of OT&E sites.

HOUSTON/GALVESTON PROJECT. On November 6 a meeting between the NWS and Galveston County was held to review the design of the Galveston County Emergency Management Center. The center will be shared by the Galveston County Office of Emergency Management, NWS and 911 emergency operations.

Construction is expected to begin in April 2003 and be complete and ready for occupation by June 2004. The building and communications tower will be capable of sustaining Category 4 hurricane winds of 140 mph. It will also withstand storm surges associated with a Category 5 hurricane with three second wind gusts up to 175 mph.

A description of the typical HVAC system now in use at most WFOs emphasizing redundancy for the critical systems was provided to the architects along with new operational equipment heat loads developed for the new Key West WFO.

WFO ALBUQUERQUE. On October 24, WFO Albuquerque experienced a lightning strike which caused an estimated \$43,000 in damage to operational and office equipment. The NWS leases the facility from the city through the airport authority. A site inspection revealed that although both the lease and construction documents called for a lightning protection system, the facility does not have one. NWS FETs and regional engineers are working with MASC and local airport officials on the best approach to install the required lightning protection system.

ENVIRONMENTAL COMPLIANCE AND SAFETY. Several gallons of hydraulic fluid spilled in the parking lot at WFO Jacksonville by a crane contractor installing new HVAC condensing units. ECS focal point Pat Welsh and ET Shane Still were quick to seal the parking lot drain with a specially designed rubber drain mat preventing contamination of the nearby retention pond. The mat was purchased with money from the \$2M ECS unfunded requirement approved by the Corporate Board earlier in the year. Even though the reportable spill quantity for hydraulic fluid in Florida is 25 gallons or more, any oily sheen visible on the pond would have been reportable to the Jacksonville airport storm water pollution discharge monitoring system. Efforts are underway by FET Larry Pace to have two areas on the asphalt parking lot, damaged by hydraulic fluid, repaired by the crane company before resealing and striping the lot.

NEW SPILL PLANS UNDERWAY FOR LEASED OFFICES. Leased offices which did not have EPA-required Spill Containment and Countermeasures Plans (SPCC) prepared at the time of the office occupancy are now being surveyed by WASC environmental engineer Minh Trinh and his contractor TetraTech Environmental Management, Inc. These plans describe abatement procedures, cleanup contractors, and employee training in the event of a fuel spill near the emergency power generators. One new SPCC plan has already been completed at WFO Albuquerque and the employees trained on the use of the spill kit absorbents.

PRIMARY WIRE WEIGHT SURVEYS NEARING COMPLETION. Most offices with wire weight river gauges used as the primary means of determining streamflow have surveyed their gauge sites with respect to OSHA guardrail compliance and accessibility hazards. Twenty-one sites have been identified as primary gauges and many more gauges used as backups to automated gauges have also been surveyed. The primary wire weight sites will be examined for modifications to the gauge or its mounting configuration to eliminate or minimize the hazards, and estimates will be made to determine a budget for funding the appropriate modifications.

The field surveys, including photographs, have been done by the service hydrologists, hydro focal points, and hydrometeorological technicians. Their survey information is being collected by Kandis Boyd, SR hydrology program manager, and Terry Brisbin, ECS regional coordinator. In many cases the greater gauge hazard was deemed to be the high speed auto traffic with little to no roadway shoulder for the observer to access the gauge, rather than the guardrail height itself being less than the OSHA-required 39 inches. In the case of primary and backup gauges, Southern Region employees have been instructed not to use these gauges if the guardrail height is not OSHA compliant, per instructions from both OGC and OOS.

FANG EXPANSION IMPACTS WFO JACKSONVILLE. Plans by the Florida Air National Guard (FANG) to increase the perimeter of their property for security reasons may impact both public access to the WFO as well as employee access during peak traffic periods. Discussions have been held by the MIC Steve Letro with the airport management and FANG representatives.

WFO KEY WEST 95% DESIGN REVIEW. The 95% design review conference for the new Key West WFO will be held this month. The 35% design review was held on October 23 with a number of unresolved issues to be addressed by the architects and engineers before the 95% review. Among the open issues at the 35% review were the upper air transmitter antenna tower configuration, RRS power requirements and dimensions, security equipment, plumbing changes, HVAC fresh air requirements, vibration isolation for the standby generator, hurricane shutter operations, furniture layout questions, and others. A separate conference call was held with a lobby display firm for a conceptual study of costs and configurations to present the NWS mission to the public in the Key West building lobby entrance.

OBSERVATIONS AND FACILITIES BRANCH

AWIPS. Operational Build 1 (OB1) Alpha was successfully installed at SRH last month. Frank Lucadamo, Mike Moss, and Sanford Gerard from NWS Headquarters assisted SR AWIPS program manager Eric Howieson and SR electronics program manager Steven Baker during the install process. Overall the installation went well and testing of new functionality and system stability will continue.

Some of the highlights of OB1 include: ACARS data, POES Bufr Soundings, High Resolution (8 bit) SRM, and RFC Archive Server.

As of the end of November, all Southern Region WFOs have installed IFPS 11.3 in preparation for AWIPS Build 5.2.2. IFPS 11.4 patch installations will continue into early December. In addition, scheduling for IFPS 12.2 has been approved and will likely begin across Southern Region this month.

AWIPS Build 5.2.2 installs will continue this month and should be complete by the end of next month. Maintenance Release (MR) 5.2.2.1 has already been approved and should be installed upon completion of the 5.2.2 install. MR 5.2.2.2 is slated to be released in early January and will include a fix for radar dial modem hangs in addition to several other fixes.

All SR WFOs and RFCs have completed the Linux CP upgrade as of the end of last month.

ASOS. The new FAA ASOS installation at West Memphis, Tennessee was completed on November 13. With coordination from Al Wissman, NWSH, and Victor Murphy, SRH, the electronics staff from WFO Memphis installed, calibrated and certified the sensors to implement an excellent system for full operations. Special thanks to the WFO Memphis electronics staff for their participation and a job well done; George Bailey, ESA, Tom Burgdorf, ET, and Margaret Tippy, ET.

Southern Region is continuing to support the installations for new ASOS CPU upgrades, dew point sensor, and ice-free wind sensor.

UPPER AIR. SRH regional systems specialist Charlie Lake and regional maintenance specialist Mike Hughes assisted Key West with their upper air system by providing technical expertise and aiding in the hardware installation during system malfunctions. System evaluation and operator guidance were also provided to ensure continuance of a quality upper air system.

Regional offices continue to lose valuable data due to the unavailability of parts. WFOs Key West and Lake Charles were required to wait for back-ordered parts to restore their systems back to full operations. One system had to limp along while the other system was completely inoperable.

WSR-88D. SRH regional systems specialist Joe Villescaz worked with the Radar Operations Center Beta Test director by providing test sites for the new build to be used in the ORPG. WFOs Norman, Corpus Christi and Tulsa will assist in testing the new RPG Build 3.0 software. The sites, along with engineers from the ROC, will gather and collect data and report their findings to the ROC director.

NWR. Dilley and D'Hanis, Texas have been fitted with new dual Crown WRG- 300W NWR transmitters. The installation of these two sites will greatly enhance NOAA Weather Radio coverage in the southern portion of Texas. Site installations were coordinated by RMS Terry Hempen, and are being broadcast from WFO Austin/San Antonio.

ELECTRONICS. SRH electronics program manager Steven Baker, with the assistance of RMSs Joe Villescaz and Charlie Lake, conducted a Regional Maintenance Systems Workshop in Fort Worth last month. The workshop provided guidance, expanded on system experience, and will help ensure overall NWS systems improvement. Programs and areas that received attention were NOAA Weather Radio, ASOS , upper air, WSR-88D, computer security awareness, EMRS, and quality assurance. Those in attendance enhanced their system knowledge, and now have a greater appreciation for the processes of system implementation, and in return they provided excellent feedback to aid in regional operations.

NETSCAPE MAIL. After long discussions with the NWS Netscape Mail group, we have come to a consensus that purchasing new Sun Solaris mail servers would be an advantage to all of NOAA due to the fact that Sun Microsystems owns the Netscape Messaging software and they develop all the code on Sun Solaris systems. Windows NT will become “End of Life” as of January 1, 2003 so our future support is limited until we can migrate to the Sun platform. We have purchased three SunFire 480 servers. Two of the servers will be our primary messaging and directory servers, and one will serve as a hot backup messaging server.

The current plan is to migrate the directory server to the Sun platform and to move to the current release of 5.x Directory server software. Nationally this may not take place until May of 2003 when NWSH can successfully migrate the code to fit the NOAA implementation. Hopefully the messaging server will follow soon. There have been negotiations with Sun to keep our current support active until we can successfully migrate to the new systems. We will be upgrading our current directory server to NT4.0-SP6a and installing Netscape Directory server 4.1 - SP1. This will keep our support with Sun active for one additional year.

COMPUTING SYSTEMS. We have installed two Snap (NAS) servers to evaluate onsite data backups and data storage. All PCs in the regional office have Datakeeper software installed on them to ensure automated backups of all critical data. The second Snap server has been set up with “Snap2Snap” software so we can backup the primary snap server each night. After three weeks in operation all looks great. We will be looking at office site backup in the coming months.

Southern Region IT manager Gary Petroski traveled to WFO Miami to reconfigure the LDM computer used for radar data transfer via DSL. This program seems to be working very well. The University of Oklahoma intends to fund WFOs Amarillo, Lubbock and Fort Worth to establish DSL connections and eliminate their dedicated 56K lines used for near realtime data transfer.

TELECOMMUNICATIONS. We have ordered four NWR circuits to be moved from WFO Birmingham to WFO Huntsville. Two of the circuits (Russellville and Cullman, Alabama) have been installed and are awaiting NWS testing and acceptance. The final two circuits (Henagar and Huntsville, Alabama) are to be installed by December 13. Once these circuits are accepted by NWS, the office will coordinate the cutover of the transmitters from the Birmingham circuits to the Huntsville circuits. This action will complete the transition of the four NWR circuits from Birmingham to Huntsville.

We have also ordered NWR circuits and phone lines to support ROAMS for the Rio Grande City, Texas and Winchester, Tennessee NWR sites. These orders are in the queue and are being worked currently.

Proposals were submitted to the NWSH frequency manager to remove some unused licenses for UHF links for NWR transmitters. The frequency licenses are no longer required and will be deleted from the frequency database. On the other hand, a number of frequency licenses have been updated in the database in an effort to insure information is accurate and current.

ADMINISTRATIVE MANAGEMENT DIVISION

DIVERSITY/EEO AND COMMUNITY OUTREACH ACTIVITIES

WFO BIRMINGHAM. HMT Kristina Sumrall provided an entire school in Demopolis, Alabama with great weather training. The students broke into three groups. She covered severe weather safety, weather radio, basic weather principles, and did hands-on experiments with the K-2nd grade group. For the third through sixth grade group, she did the above along with weather terminology and "safe places" during severe weather. For the final group, seventh through 12th grade, Kristina added physical processes involved with weather and career opportunities in meteorology. Each teacher was given a weather information packet, tornado tube, and a list of weather experiments and demonstrations to use while teaching.

WFO BROWNSVILLE. The WFO participated in the annual "Boo at the Zoo" event sponsored by the Gladys Porter Zoo in Brownsville. ITO James Raley, senior forecaster Brian Miller, HMT Tony Abbott and DAPM Jim Campbell hosted a treat station for the event, handing out a variety of NWS paraphernalia. The event was attended by nearly 12,000 people over the course of two evenings, and provided excellent exposure for the WFO.

As a result of Jim's networking with teachers at the "Boo at the Zoo" event he gave weather presentations to 88 students of St. Luke Catholic School. The presentations focused on weather awareness and preparedness in the Rio Grande Valley. Jim also gave a weather presentation to 60 Harlingen Cub Scouts and their parents. The presentation was primarily to help with the weather portion of the Cub Scout's Academics in aiding them in earning their loops or pins.

HMT Dana Watkins, ASA Rachel Gutierrez, and Jim Campbell hosted an NWS booth at the Lucio Middle School Career Day. They handed out NWS paraphernalia to approximately 880 students and teachers during the course of the day. On this same day, senior forecaster Brian Miller and HMT Sam Martinez hosted a booth at the Perkins Middle School Career Day. They answered questions and provided pamphlets and brochures to about 300-400 students.

WFO SAN JUAN. Twenty-one students from the Inter-American University aviation meteorology class visited and toured the WFO. WCM Rafael Mojica discussed the WFO aviation program. The students had the opportunity to see WFO operations and how the latest technology is used during inclement weather, as a tropical wave and an upper low pressure was impacting the area at the time of their tour.

A group of senior geography students from the Inter-American University, Fajardo Campus, visited and toured the WFO. MIC Israel Matos, and forecasters Miguel Sierra and Pancho Balleste assisted the students during their visit.

WFO ALBUQUERQUE. The National Science Teacher's Association met in Albuquerque from December 5-7. NOAA had a booth in the exhibit hall. WFO Albuquerque SOO Deirdre Kann staffed the booth with two other NOAA employees on Thursday. Deirdre reported that for about the first hour, a line of teachers waited for the wide variety of NOAA materials being distributed, which were appropriate for most levels from primary grades through high school. The big hit was the selection of posters developed by NOAA research which included high quality color graphics with associated classroom activities on the bottom. A large quantity of materials was distributed, and the teachers were anxious to receive them. Many of the teachers also commented on how useful the various NOAA Web sites are.

Deirdre and WFO forecaster Kerry Jones also participated in the two-day Children's Water Festival at the Albuquerque Convention Center on October 17 and 18. Nearly 1000 fourth grade students from Albuquerque, Los Lunas and Rio Rancho participated in the Water Festival, which is basically a celebration of water education. There are 20 concurrent activities, and each group of students rotates through five activities. Kerry and Deirdre hosted "Weather or Not," in which students analyze meteorological and hydrologic data to determine if a flash flood might occur, then issue warnings and call-to-action statements and monitor the flood event. They were asked to participate in a new water festival which is planned for Santa Fe next March.

SOUTHERN REGION WORKFORCE TRANSACTIONS
NOVEMBER 1 - 30, 2002

Southern Region Losses

| <u>Name</u> | <u>From (Office)</u> | <u>Action/Transfer</u> | <u>From Title/Grade</u> |
|----------------|----------------------|------------------------|--------------------------|
| Vicky Williams | WFO LCH | Resignation | ASA, GS-7 |
| Donald Silva | WFO FFC | Retirement | HMT, GS-11 |
| Brian LaMarre | WFO CRP | Transfer to NWSH | Senior Forecaster, GS-13 |
| Rhea Fryar | WFO LUB | Resignation | ASA, GS-7 |

Southern Region Gains

| <u>Name</u> | <u>To (Office)</u> | <u>Action/Transfer</u> | <u>To Title/Grade</u> |
|-----------------|--------------------|------------------------|--------------------------|
| David L. Craft | WFO ABQ | New Hire | Forecaster, GS-7 |
| Douglas Cain | WFO MAF | Transfer from CR | Senior Forecaster, GS-13 |
| Ronald McQueen | WFO LUB | Transfer from WR | Senior Forecaster, GS-13 |
| John P. Gagan | WFO JAN | New Hire | Forecaster, GS-7 |
| Charles A. West | CWSU ZTL | New Hire | Meteorologist, GS-12 |
| Matthew Parke | WFO EYW | New Hire | Met Intern, GS-11 |
| Paul D. Rogers | WFO BRO | New Hire | El Tech, GS-10 |
| Harold Crowley | RFC TUA | New Hire | Hydrologist, GS-7 |

Within Region Transfers/Actions

| <u>Name</u> | <u>To (Office)</u> | <u>Action/Transfer</u> | <u>To Title/Grade</u> |
|------------------|--------------------|------------------------|---------------------------|
| Steven Smart | WFO OUN | Transfer from CRP | HMT, GS-11 |
| Jeffrey McMurphy | RFC TUA | Promotion from TUA | Senior Hydrologist, GS-13 |